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EXAMINER

LIU, SAMUEL W

ART UNIT PAPER NUMBER

1653

DATE MAILED: 01/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/880,503

**Applicant(s)**

CINES ET AL.

**Examiner**

Samuel W Liu

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,10,13,19-21,23,27 and 29-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-9,11,12,14-18,22,24-26,28,54 and 55 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 415-02
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2-31-03
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

#### *Status of the claims*

Claims 1-55 are pending.

Applicants' request for extension of time of four months (filed 28 January 2002) has been entered.

#### *Election/Restrictions*

Applicant's election without traverse (see the response filed 5 November 2003) of Group I, claims 1-2, 5-9, 11-12, 14-18, 22, 24-26, 28 and 54-55 is acknowledged. Additionally, in response to the restriction requirement mailed 2 October 2003, applicants elected smooth muscle from claim 7, phenylephrine from claim 8, a vascular smooth muscle from claim 18, the connecting peptide from claim 2, SEQ ID NO:8 sequence from claim 28, and uPA kringle from claim 54 for the examination is acknowledged. Note that claim 5 is included in the elected Group I. Claims 3-4, 10, 13, 19-21, 23, 27 and 29-53 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention for the reasons stated above and in the restriction requirement.

Therefore, the elected claims 1-2, 5-9, 11-12, 14-18, 22, 24-26, 28 and 54-55 are under examination to the extent that they are drawn to the elected invention.

#### *IDS*

The references lists in IDS filed 31 July 2003 and 15 April 2002 have been received and considered.

#### *Object to Oath*

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The oath or declaration of this application is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because the signature for the full name of inventor Abd Al-Roof Higazi is unclearly set forth; a signature for clearly identifying the inventor thereof is required (see "Inventor's Signature" section of the declaration for Abd Al-Roof Higazi, page 3 of "Declaration" filed 28 January 2002).

### ***Specification/Claim/ Objections***

The disclosure is objected to because of the following informalities:

(1) In page 15, line 27, "PCR"; page 67, lines 12-13, "SDS-PAGE"; and page 68, line 17, "MALDI-TOF" should be spelled out in full at the first instance of use.

(2) In page 72, line 25, "calculated from the ratio of the kinetic constants ( $K_d = k_d/k_a$ )" should be changed to "calculated from the ratio of the association rate constant to the disassociation rate constant, i.e.,  $K_a/K_b$ ."

(3) In claim 9, "two chain urokinase" should be changed to "two-chain urokinase".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-2, 6-9, 11-12, 14-18, 22, 24-26, 28 and 54-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites “modulate”; the recitation is unclear as to whether or not the action of modulation refers to up-regulation or a down-regulation which are mutually exclusive in that they reach opposing endpoints. See also claim 28. Also, claim 1 is unclear in “one or more of the contractility and the angiogenic activity”; how many do biological activities associate with contractility or/and angiogenicity which are up- or down-regulated by the claimed uPA kringle? See also claim 2. In addition, claim 1 is indefinite because the claims recites “at least about 75%” and the “at least” is a narrower range than “about” which falls outside of this range. See also claims 9, 22 and 24-25. The dependent claims are also rejected.

Claim 2 is unclear as to whether or not the composition covalently or non-covalently comprises (i) the growth factor domain, or/and (ii) the connecting peptide, or/and (iii) the protease domain.

Claim 28 recites “said one or more polypeptides”; the recitation is indefinite because only is one polypeptide molecule (SEQ ID NO:8) elected and because the claim does not make it clear as to whether or not the composition encompasses more than one polypeptides thereof.

Claims 12 and 14 recite “isolated kringle” and “isolated AFT”, respectively; the recitations are vague as to whether or not the said kringle fragment or AFT fragment comprises heterogeneous component because claims 1 (from which claim 12 depends) and claim 11 (from which claim 14 depends) and specification do not clearly set forth the sequences of the kringle

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and the ATF (amino terminal fragment) thereof, which permits numerous possibilities of the kringle and the ATF fragments.

Claim 15 recites “enhancing or disinhibiting”; the recitation is not apparent because the result of disinhibiting the contractility is not equal to that of enhancing the contractility; to which process, disinhibiting or enhancing, is the claim directed?

Claim 22 is not apparent in the recitation “scuPA<sup>Δ136-143</sup>”, because the recitation has been insufficiently defined in the specification and because the recitation is unclear as to whether or not scuPA fragment comprises a single deletion at amino acid residue 136. Suggest “scuPAΔ(136-143)” instead.

Claim 28 recites “one or more polypeptides”; the recitation is unclear as to how many polypeptide molecules are included in the claimed composition. Also, claim 28 recites “modulate one or more of the contractility and the angiogenic activity”; how many do biological activities associate with contractility or/and angiogenicity which is up-regulated or down-regulated by the recited polypeptide(s)? See also claim 54.

Claim 54 is indefinite in “as a symptom thereof”; what does the symptom refer to? Also, the recitation “symptom thereof” lacks sufficient antecedent basis in the claim. Additionally, claim 54 recites “one or more of (a) the uPA kringle, (b) the uPA growth factor domain, and (c) the connecting peptide”; the recitation is unclear regarding (i) whether or not the claimed composition includes all the components (a) to (c), and (ii) how many the components (a) or/and (b) or/and (c) the kit composition comprises.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-2, 5-9, 11-12, 14-18, 22, 24-26, 28 and 54-55 are rejected under 35 U.S.C. 112, first paragraph, because the specification, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant is in possession of an isolated composition comprising uPA that comprises the kringle sequence (SEQ ID NO:1), or/and amino terminal fragment (ATF) or/and a connecting peptide (SEQ ID NO:9), or/and a protease domain, or/and a uPA variant of SEQ ID NO:6, and comprises an inducing compound that mediates the muscle contraction, and in possession of a kit comprising the composition thereof. Applicant is not in possession of (i) a composition comprising any uPA variants or derivatives that have about 75% sequence homology with SEQ ID NO:1 (claim 1), SEQ ID NO:3 (claim 9), SEQ ID NO:4 (claim 11), SEQ ID NO: 6 (claim 22) or SEQ ID NO:9 (claim 25), (ii) a composition comprising an unlimited number of fragments or/and the growth factor domains, or/and the connecting peptide fragments or/and the protease domains (see claim 2), and (iii) a kit comprising a composition that comprises an unlimited number (numerous) the growth factor domain(s), or/and the connecting peptide fragment(s) or/and the protease domain(s) (see claim 54).

The current claim language “share at least about 75% homology” is the open-ended and encompasses a large quantity of undefined polypeptide compositions, e.g., the uPA kringle or/and the growth factor domain or/and the connecting peptide domain of the uPA. The specification is silent in providing description or working examples and guidance regarding the composition

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thereof. The instant disclosure sets forth “one or more domains of uPA” (see claim 2); such the claim language encompasses multimeric *homo*-domain and *hetero*-domain polypeptide compositions, which have not been sufficiently described in the specification. Thus, applicant is not in possession of the above-mentioned compositions. One of skill in the art would reasonably conclude that the disclosure fails to provide a representative number of species to describe the genus. Thus, Applicant was not in possession of the claimed genus. *See University of California v. Eli Lilly and co.* 43 USPQ2d 1398.

Also, the instant claims set forth the uPA kringle modulation of one or more of the contractility and the angiogenic activity of a mammalian muscle cell or tissue (see claim 1). Yet, the specification does not provide working example(s) or guidance as to modulation of the angiogenic activity of the muscle cell or tissue by the UPA kringle. Note that the specification only provides the working example of modulation of the muscle contractility by the uPA kringle polypeptide. Therefore, the skilled artisan cannot envision the contemplated biological activity regulated by the uPA kringle polypeptide composition thereof. Consequently, conception cannot be achieved until a representative description of the structural and functional properties of the claimed invention has occurred. Adequate written description requires more than a mere statement that it is part of the invention. See *Fiers v. Revel*, 25 USPQ2d 1601, 1606 (CAFC1993).

Vas-Cath Inc. v. Mahurkar, 19 USPQ2d 1111, makes clear that “applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purposes of the written description inquiry, whatever is now claimed.” (See page 1117.) The specification does not “clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed.” (See Vas-Cath



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at page 1116.). Consequently, Applicant was not in possession of the instant claimed invention.

See University of California v. Eli Lilly and Co. 43 USPQ2d 1398.

Applicant is directed to the Revised Interim Guidelines for the Examination of Patent Applications Under the 35 U.S.C. 112, ¶ 1 "Written Description" Requirement, Federal Register, Vol. 66, No. 4, pages 1099-1111, Friday January 5, 2001.

### ***Claim Rejections - 35 USC §102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5-6, 9, 11, 17-18, 24-26 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Gurewich, V. (US Pat. No. 5759542) as is evidenced by Li X. et al. (*Biochemistry* (1992) 31, 9562-9571).

Gurewich teaches a composition (see the patent claims 1 and 11, and Figure 2) comprising the urokinase plasminogen activator (uPA) kringle (see SEQ ID NO:18, residues 48-135) which sequence is 100% identical to the application SEQ ID NO:1, residues 1-88, as applied to claim 1 of the instant application

Gurewich teaches a composition (see the patent claims 1 and 11, and Figure 2) comprising the uPA connecting peptide and protease domain (see SEQ ID NO:18, residues 136-

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411) which sequence is 100% identical to the application SEQ ID NO:1, residues 1-276, as applied to claim 5 of the instant application

The composition taught by Gurewich is a fusion drug (see the patent claim 1) wherein the uPA polypeptide is linked to a drug (see also abstract); the fusion drug has ability of modulating (e.g., inhibiting) biological function or angiogenic activity of smooth muscle cells or vascular smooth cells (see column 4, lines 4-14, and column 12, lines 32-41). The above Gurewich's teaching is applied to the application claims 17-18.

Since Gurewich teaches the subject to which the composition is administered is human (see column 9, line 46 to column 10, line 7), the above Gurewich teaching anticipates claim 6 of the current application.

Gurewich teaches that the said uPA polypeptide of SEQ ID NO:18 comprises a growth factor domain (see Figure 2), as applied to the application claims 2.

Also, Gurewich teaches the multiple chains of uPA (i.e., high molecular weight urokinase (HMW-UK), see column 2, lines 21-31, column 5, line 52, and column 3, lines 58-65), and the uPA polypeptide, i.e., SEQ UD NO:18 (residues 1-411) is of 100% sequence identity to the application SEQ ID NO:3 (residues 1-411) wherein the high molecular weight uPA is the two-chain form of uPA as is evidenced by Li X. et al. (see the first paragraph, page 9562). Thus, the Gurewich's teaching meets the limitation set forth in claim 9 of the current application.

Gurewich teaches that the composition comprises the amino terminal fragment (ATF) of SEQ ID NO:18 (residues 1-135) which is 100% identical to the application SEQ ID NO:4. The Gurewich's teaching anticipates claim 11 of the current application.

Gurewich teaches that the composition comprises a polypeptide of SEQ ID NO:18 (residues 1-143) which is 100% identical to the application SEQ ID NO:8 (residues 1-143); said polypeptide comprises the ATF sequence and the connecting peptide of uPA. The Gurewich's teaching anticipates claims 24 and 28 of the current application.

Also, Gurewich teaches that the composition comprises a polypeptide of SEQ ID NO:18 (residues 48-143) which is 100% identical to the full-length sequence of the application SEQ ID NO:8 (residues 1-96). The Gurewich's teaching anticipates claim 25 of the current application.

Further, Gurewich teaches that the above-mentioned composition is for therapeutic use and formulated with pharmaceutically acceptable carrier (see the patent claims 1 and 10-11, and columns 16-17), i.e., the composition is a pharmaceutical composition. Thus, Gurewich's patent anticipates the application claim 26.

Claims 1-2, 5 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Steffens, G. J. et al. (US Pat. No. 5681721).

Steffens et al. teach a thrombolytic composition comprising an effective thrombolytic amount of a urokinase (*i.e.*, a plasminogen activator) comprising polypeptide sequence SEQ ID NO:83 (see the patent claims 1 and 18, and columns 41-44) wherein the residues 2-89 of the patent SEQ ID NO:2 is 100% identical to residues 1-88 of SEQ ID NO:1 of the current application. Steffens et al. teach that the polypeptide of SEQ ID NO:83 comprises the kringle domain (see Figure 1 and column 6, lines 41-42) and that uPA has characteristics of containing

three domains: an amino-terminal growth factor domain, a kringle, and protease domain. The above Steffens et al. teaching anticipates the application claims 1-2.

Steffens et al. teach a composition (see the patent claims 1 and 11, and Figure 2) comprising the uPA connecting peptide and protease domain (see SEQ ID NO:83, residues 90-365) which sequence is 100% identical to the application SEQ ID NO:1, residues 1-276, as applied to claim 5 of the instant application

Also, Steffens et al. teach that the composition is a pharmaceutical composition (see the patent claims 18-19), as applied to claim 26 of the instant application.

### ***Claim Rejections - 35 USC §103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2, 5-6, 9, 11, 17-18, 24-26, 28 and 54-55 are rejected under 35 U.S.C. 103(a) as being obvious over Gurewich, V. (US Pat. No. 5759542) taken with Li X. et al. (*Biochemistry* (1992) 31, 9562-9571) and Flora, L. et al. (US Pat. No. 4761406).

Gurewich teaches a composition (see the patent claims 1 and 11, and Figure 2) comprising the urokinase plasminogen activator (uPA) kringle (see SEQ ID NO:18, residues 48-135) which sequence is 100% identical to the application SEQ ID NO:1, residues 1-88, as applied to claim 1 of the instant application

Gurewich teaches a composition (see the patent claims 1 and 11, and Figure 2) comprising the uPA connecting peptide and protease domain (see SEQ ID NO:18, residues 136-411) which sequence is 100% identical to the application SEQ ID NO:1, residues 1-276, as applied to claim 5 of the instant application

The composition taught by Gurewich is a fusion drug (see the patent claim 1) wherein the uPA polypeptide is linked to a drug (see also abstract); the fusion drug has ability of modulating (e.g., inhibiting) biological function or angiogenic activity of smooth muscle cells or vascular smooth cells (see column 4, lines 4-14, and column 12, lines 32-41). The above Gurewich's teaching is applied to the application claims 17-18.

Since Gurewich teaches the subject to which the composition is administered is human (see column 9, line 46 to column 10, line 7), the above Gurewich teaching anticipates claim 6 of the current application.

Gurewich teaches that the said uPA polypeptide of SEQ ID NO:18 comprises a growth factor domain (see Figure 2), as applied to the application claims 2.

Also, Gurewich teaches the multiple chains of uPA (i.e., high molecular weight urokinase (HMW-UK), see column 2, lines 21-31, column 5, line 52, and column 3, lines 58-65), and the uPA polypeptide, i.e., SEQ UD NO:18 (residues 1-411) is of 100% sequence identity to the application SEQ ID NO:3 (residues 1-411) wherein the high molecular weight uPA is the two-chain form of uPA as is evidenced by Li X. et al. (see the first paragraph, page 9562). Thus, the Gurewich's teaching is applied to claim 9 of the current application.

Gurewich teaches that the composition comprises the amino terminal fragment (ATF) of SEQ ID NO:18 (residues 1-135) which is 100% identical to the application SEQ ID NO:4. The Gurewich's teaching is applied to claim 11 of the current application.

Gurewich teaches that the composition comprises a polypeptide of SEQ ID NO:18 (residues 1-143) which is 100% identical to the application SEQ ID NO:8 (residues 1-143); said polypeptide comprises the ATF sequence and the connecting peptide of uPA. The Gurewich's teaching is applied to claims 24 and 28 of the current application.

Also, Gurewich teaches that the composition comprises a polypeptide of SEQ ID NO:18 (residues 48-143) which is 100% identical to the full-length sequence of the application SEQ ID NO:8 (residues 1-96). The Gurewich's teaching anticipates claim 25 of the current application.

Further, Gurewich teaches that the above-mentioned composition is for therapeutic use and formulated with pharmaceutically acceptable carrier (see the patent claims 1 and 10-11, and columns 16-17), i.e., the composition is a pharmaceutical composition. Thus, Gurewich's patent is applied to the application claim 26.

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Gurewich et al. do not teach a pharmaceutical composition or a kit comprising the composition comprising a polypeptide that comprises the uPA kringle, or/and the uPA growth factor domain, or/and the connecting peptide.

Flora et al. teach kits which facilitate the necessary strict compliance with methods of treatments and include pharmaceutical composition (e.g., see column 1, paragraph 1; column 2, paragraph 3 and columns 13-15). It is noted the only active ingredient in the claimed kits and articles of manufacture is the biopolymer, i.e., anti-CD147 antibody. Although the kits comprise instructions, there is no patentable weight given to the instructions themselves. It is also noted that the written material in the instructions is not considered to be within the statutory classes and does not carry patentable weight. See MPEP 706.03(a). While the claims 54 and 55 recite a kit, no positive recitation of the ingredients distinguishes it over the references; therefore the pack is encompassed by the references. However, if this is not the case, it is a well-known convention in the art to place these components in a pack for convenience and economy. Thus, the Flora et al. teaching is applied to the application claims 54 and 55.

One of ordinary skill in the art would have combined the teachings of the above references because of the following advantages: (a) eliminates any effect of in vivo plasma clearance of the fusion drug prior to the composition interaction with the target tissue or cell as taught by Gurewich et al. (see column 3, lines 41-45), (b) fusion drug comprising the uPA offers a benefit, i.e., resistant to proteolysis by the presence of a protective chemical group by Gurewich et al. (see column 4, lines 32-34), (c) the fusion drug thereof has versatile pharmaceutical interests, e.g., enhancing smooth muscular function (see columns 16-18), and (d)

formulating a pharmaceutical composition into a kit is for conveniently and effectively implementing the method of treatment, as taught by Flora et al. (see column 13, lines 40-44).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to formulating the composition comprising a polypeptide that comprises the uPA kringle, or/and the uPA growth factor domain, or/and the connecting peptide into a kit for the convenience and economy of the user. One would have been motivated to assemble the reagents in a kit format to standardize the reagents for the optimization the assay for use in a clinical diagnostic laboratory or physician's office.

Given the above motivation one of ordinary skill in the art would have combined the above reference teachings to develop the pharmaceutical composition comprising the uPA kringle and domain and connecting peptide as mentioned above, and to formulate the pharmaceutical composition thereof into a kit as claimed in the current application.

***Provisional Rejection - Obviousness Type Double Patenting***

Claims 1 and 26 of this application conflict with Claim 3 of Application No. 09968752. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible



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harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130 (b). Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 26 are provisionally rejected under the judicially created doctrine of double patenting over claim 3 of copending Application No. 09968752. This is a provisional double patenting rejection because the conflicting claims have not in fact been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

Claim 3 of Application 09968752 claims a pharmaceutical composition comprising a UPK (i.e., tcuPA) that comprises the sequence which reads on SEQ ID NO:1 of the current application claim 1 (see [0006] of 09968725 which indicates the tcuPA polypeptide by the incorporated reference "*Kasai, S. et al. (1985) J. Biol. Chem. 260, 12382-12389*"); note that the Kasai et al. reference teaches the sequence (residues 48-135) which is 100% identical to the

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current application SEQ ID NO:1 (residues 1-88). Since the claim 1 of the instant application sets forth a composition without further specifying what composition is, claim 3 of 09968752 is an obvious variation of claims 1 and 26 of the instant application. Therefore, the instant application and Application 09968725 claims are not patentably distinct from each other.

### ***Conclusion***

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel Wei Liu whose telephone number is (571) 272-0949. The examiner can normally be reached from 9:00 a.m. to 5:00 p.m. on weekdays. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Christopher Low, can be reached on (571) 272-0951. The fax phone number for the organization where this application or proceeding is assigned is 703 308-4242 or 703 872-9306 (official) or 703 872-9307 (after final). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-4700.

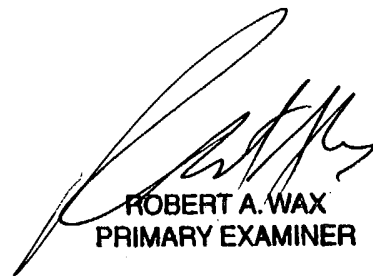
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A handwritten signature in black ink, appearing to read 'SWL'.

Samuel W. Liu, Ph.D.

January 8, 2004

A handwritten signature in black ink, appearing to read 'Robert A. Wax'.

ROBERT A. WAX  
PRIMARY EXAMINER